



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,440	08/14/2003	Eli Wallace	ARR002	2454
37802	7590	11/16/2005	EXAMINER	
HOGAN & HARTSON LLP ONE TABOR CENTER 1200 17TH STREET, SUITE 1500 DENVER, CO 80202			TRUONG, TAMTHOM NGO	
			ART UNIT	PAPER NUMBER
			1624	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,440

Applicant(s)

WALLACE ET AL.

Examiner

Tamthom N. Truong

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>attached</u> . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group 1: Claims 1-6, 9, 10 and 12 (in part), drawn to compounds of formula I with the following substituents:

X is N;

R¹ is an aryl group;

A is Q;

classified in class 544, various subclasses depending on other substituents. An election of species is also required for this group.

Group 2: Claims 1-6, 9, 10 and 12 (in part), drawn to compounds of formula I with the following substituents:

X is N;

R¹ is a heteroaryl group;

A is Q;

classified in class 544, various subclasses depending on other substituents. An election of species is also required for this group.

Group 3: Claims 1-12 (in part), drawn to compounds of formula I with the following substituents:

X is N;

R^1 is an aryl group;

A is $-(U)_nZ$, and Z is a ring system having a (5-membered ring)=N.

classified in class 544, various subclasses depending on other substituents. An election of species is also required for this group.

Group 4: Claims 1-12 (in part), drawn to compounds of formula I with the following substituents:

X is N;

R^1 is a heteroaryl group;

A is A is $-(U)_nZ$, and Z is a ring system having a (5-membered ring)=N;

classified in class 544, various subclasses depending on other substituents. An election of species is also required for this group.

Group 5: Claims 1-6 and 9-12 (in part), drawn to compounds of formula I with the following substituents:

X is N;

R^1 is an aryl group;

A is $-(U)_nZ$, and Z is a ring system having a (6-membered ring)=N.

classified in class 544, various subclasses depending on other substituents. An election of species is also required for this group.

Group 6: Claims 1-6 and 9-12 (in part), drawn to compounds of formula I with the following substituents:

X is N;

R¹ is a heteroaryl group;

A is A is $-(U)_nZ$, and Z is a ring system having a (6-membered ring)=N;
classified in class 544, various subclasses depending on other substituents. An
election of species is also required for this group.

Group 7: Claims 1-6, 9, 10 and 12 (in part), drawn to compounds of formula I with
the following substituents:

X is CH, CF or C-CN;

R¹ is an aryl group;

A is Q;

classified in class 546, various subclasses depending on other substituents. An
election of species is also required for this group.

Group 8: Claims 1-6, 9, 10 and 12 (in part), drawn to compounds of formula I with
the following substituents:

X is CH, CF or C-CN;

R¹ is a heteroaryl group;

A is Q;

classified in class 546, various subclasses depending on other substituents. An
election of species is also required for this group.

Group 9: Claims 1-12 (in part), drawn to compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is an aryl group;

A is $-(U)_nZ$, and Z is a ring system having a (5-membered ring)=N.

classified in class 546, various subclasses depending on other substituents. An election of species is also required for this group.

Group 10: Claims 1-12 (in part), drawn to compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is a heteroaryl group;

A is $-(U)_nZ$, and Z is a ring system having a (5-membered ring)=N;

classified in class 546, various subclasses depending on other substituents. An election of species is also required for this group.

Group 11: Claims 1-6 and 9-12 (in part), drawn to compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is an aryl group;

A is $-(U)_nZ$, and Z is a ring system having a (6-membered ring)=N.

classified in class 544, various subclasses depending on other substituents. An election of species is also required for this group.

Group 12: Claims 1-6 and 9-12 (in part), drawn to compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is a heteroaryl group;

A is A is $-(U)_nZ$, and Z is a ring system having a (6-membered ring)=N;

classified in class 544, various subclasses depending on other substituents. An election of species is also required for this group.

Group 13: Claims 13-18, 21, 22, and 24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is N;

R¹ is an aryl group;

A is Q;

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 14: Claims 13-18, 21, 22, and 24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is N;

R^1 is a heteroaryl group;

A is Q;

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 15: Claims 13-24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is N;

R^1 is an aryl group;

A is $-(U)_nZ$, and Z is a ring system having a (5-membered ring)=N.

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 16: Claims 13-24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is N;

R^1 is a heteroaryl group;

A is A is $-(U)_nZ$, and Z is a ring system having a (5-membered ring)=N;

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 17: Claims 13-18 and 21-24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is N;

R¹ is an aryl group;

A is $-(U)_nZ$, and Z is a ring system having a (6-membered ring)=N.

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 18: Claims 13-18 and 21-24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is N;

R¹ is a heteroaryl group;

A is $-(U)_nZ$, and Z is a ring system having a (6-membered ring)=N;

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 19: Claims 13-18, 21, 22 and 24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

Art Unit: 1624

X is CH, CF or C-CN;

R¹ is an aryl group;

A is Q;

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 20: Claims 13-18, 21, 22 and 24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is a heteroaryl group;

A is Q;

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 21: Claims 13-24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is an aryl group;

A is $-(U)_nZ$, and Z is a ring system having a (5-membered ring)=N.

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 22: Claims 13-24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is a heteroaryl group;

A is A is $-(U)_nZ$, and Z is a ring system having a (5-membered ring)=N;

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 23: Claims 13-18 and 21-24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is an aryl group;

A is $-(U)_nZ$, and Z is a ring system having a (6-membered ring)=N.

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Group 24: Claims 13-18 and 21-24 (in part), drawn to a method of treating hyperproliferative diseases using compounds of formula I with the following substituents:

X is CH, CF or C-CN;

R¹ is a heteroaryl group;

A is A is $-(U)_nZ$, and Z is a ring system having a (6-membered ring)=N;

classified in class 514, various subclasses depending on other substituents. An election of species is also required for this group.

Inventions of Group 1 to 24 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are distinct by different ring systems and substituents represented by the ring having X and substituents represented by A and R¹.

The inventions of Groups 1-12 are drawn to compounds of either substituted *quinazoline* or *quinoline*. Such a core alone does not sufficiently define the invention, or contribute to the art. Thus, it is the combination of at least the ring having X, and the substituent represented by A and R¹ that gives the compounds in each group their unique physical and chemical properties, which in turn determine their biological activities. For that reason, a reference that anticipated or rendered obvious compounds of one group would not do so to those of the other groups. Thus, a separate search and examination are required for each group.

The inventions of Groups 13-24 are drawn to a method of treating hyperproliferative diseases which requires additional search beyond the search for the compounds in Groups 1-12 since a reference that anticipated or rendered obvious the compound might not do so to the method of treating a hyperproliferative diseases. A preliminary search on EAST yields a total of 6,165 hits from the classes and subclasses of the above groups, which indicates a serious burden of searching.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, and to search the 6 distinct inventions would indeed impose a serious burden upon the examiner in charge of this invention, restriction for examination purposes as indicated is proper.

The examiner has required restriction between product and method claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn method claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Method claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined method claims will be withdrawn, and the rejoined method claims **will be fully**

examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, **the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112.** Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and method claims may be maintained. Withdrawn method claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the method claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

The restriction was faxed to Mr. Stuart Langley on 08-09th-05. Then, on 8-26-05, Ms. Geri Pierce requested a written restriction. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the


currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

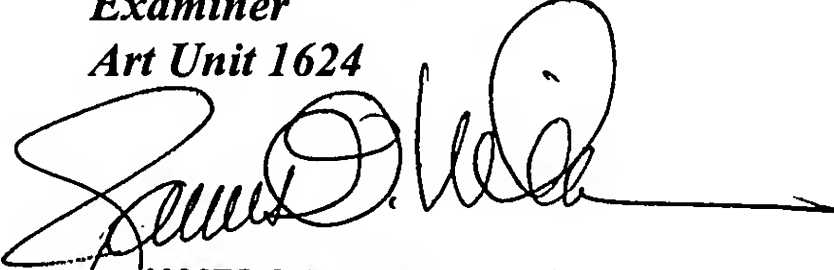
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10-18-05


Tamthom N. Truong
Examiner
Art Unit 1624


JAMES O. WILSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600